

Claims 4-6 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,128,657 to Okanoya et al. in view of Jindal et al.

In accordance with the foregoing, claims 1-6 have been amended, and claims 7-8 have been added. No new matter is being presented, and approval and entry are respectfully requested.

Claims 1-8 are pending and under consideration. Reconsideration is requested.

ENTRY OF AMENDMENT UNDER 37 C.F.R. §1.116:

Applicants request entry of this Rule 116 Response because:

(a) it is believed that the amendments of claims 1-6 put this application into condition for allowance as suggested by the Examiner;

(b) the amendments were not earlier presented because the Applicants believed in good faith that the cited prior art did not disclose the present invention as previously claimed;

(c) the amendments of claims 1-6 should not entail any further search by the Examiner since no new features are being added or no new issues are being raised; and

(d) the amendments do not significantly alter the scope of the claims and place the application at least into a better form for purposes of appeal. No new features or new issues are being raised.

The Manual of Patent Examining Procedures sets forth in Section 714.12 that "any amendment that would place the case either in condition for allowance or in better form for appeal may be entered." Moreover, Section 714.13 sets forth that "the Proposed Amendment should be given sufficient consideration to determine whether the claims are in condition for allowance and/or whether the issues on appeal are simplified." The Manual of Patent Examining Procedures further articulates that the reason for any non-entry should be explained expressly in the Advisory Action.

REJECTION UNDER 35 U.S.C. §102:

In the Office Action at pages 2-5, the Examiner rejected claims 1-3 under 35 U.S.C. §102 in view of U.S. Patent No. 6,128,657 to Okanoya et al. and claims 4-6 under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,327,622 to Jindal et al.

This rejection is respectfully traversed and reconsideration is requested.

It is respectfully submitted that, according to the present invention, the destination of the request for service is selected based on the result of measuring the load in the communication route between the route load measuring unit and the client terminal. In contrast, it is respectfully submitted that Okanoya et al. teaches that the destination of the request for service is selected based merely on the load in the server. Independent claim 1 has been amended to clarify this difference.

Thus, it is respectfully submitted that amended claim 1, and claims 2-3, which depend from amended claim 1, are now in form to be allowed under 35 U.S.C. §102 in view of U.S. Patent No. 6,128,657 to Okanoya et al.

It is respectfully submitted that Jindal et al. teaches that the destination of the request for service is selected based on the application instance or the load in the server, whereas the present claimed invention teaches that the destination of the request for service is selected based on the result of measuring the load in the communication route between the route load measuring unit and the client terminal. Independent claim 4 has been amended to clarify this difference.

Thus, it is respectfully submitted that amended claim 4, and claims 5-6, which depend therefrom, are now in form to be allowed under 35 U.S.C. §102 in view of U.S. Patent No. 6,327,622 to Jindal et al.

REJECTION UNDER 35 U.S.C. §103:

In the Office Action at pages 5-6, the Examiner rejected claims 4-6 under 35 U.S.C. §103 as being unpatentable over U.S. Patent No. 6,128,657 to Okanoya et al. in view of Jindal et al.

The rejection is respectfully traversed and reconsideration is requested.

It is respectfully submitted that, in the present claimed invention, the destination of the request for service is selected based on the result of measuring the load in the communication route between the route load measuring unit and the client terminal, which is not taught or suggested by Okanoya et al., which bases the selection of the destination of the request for service merely on the load in the server, or by Jindal et al., which bases the selection of the destination of the request for service on the application instance or the load in the server.

It may not have been clear what was meant by "the load in the route," which is recited in original independent claims 1, 4 and 6. Thus, independent claims 1, 4 and 6 have been amended, and new claims 7 and 8 have been added to clarify that the load in the route is an effective bandwidth of the route, wherein the effective bandwidth is based on a plurality of parameters. For example, in one embodiment of the present claimed invention, the plurality of parameters includes at least a round-trip time, a maximum segment size, and an average congestion window size, as described in the description in the specification.

It is respectfully submitted that, since neither Okanoya et al. nor Jindal et al. alone teaches or suggests selecting the destination of the request for service based on the result of measuring the load in the communication route between the route load measuring unit and the client terminal, as is taught by the present claimed invention, Okanoya et al. and Jindal et al. in combination also fail to teach or suggest selecting the destination of the request for service based on the result of measuring the load in the communication route between the route load measuring unit and the client terminal.

Thus, it is respectfully submitted that claims 4-6 are allowable under 35 U.S.C. §103 over U.S. Patent No. 6,128,657 to Okanoya et al. in view of Jindal et al.

ATTACHMENT

Attached hereto is a "Version With Markings to Show Changes Made," comprising a marked-up version of changes made to the Claims by the current amendment.

CONCLUSION:

In accordance with the foregoing, it is respectfully submitted that all outstanding objections and rejections have been overcome and/or rendered moot, and further, that all pending claims patentably distinguish over the prior art. Thus, there being no further outstanding objections or rejections, the application is submitted as being in condition for allowance which action is earnestly solicited. At a minimum, this Amendment should be entered at least for purposes of Appeal as it either clarifies and/or narrows the issues for consideration by the Board.

Serial No. 09/455,932

Docket No. 1341.1035

If the Examiner has any remaining issues to be addressed, it is believed that prosecution can be expedited and possibly concluded by the Examiner contacting the undersigned attorney for a telephone interview to discuss any such remaining issues.

If there are any additional fees associated with the filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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VERSION WITH MARKING TO SHOW CHANGES MADE

IN THE CLAIMS

Please **AMEND** claims 1-6 and **ADD** new claims 7-8, as follows.

1. (ONCE AMENDED) A relaying apparatus for use in a network system, [which] the network system including [is formed with] a plurality of client terminals and server terminals providing services to those client terminals via a network, the relaying apparatus comprising:
a plurality of route load measuring units each provided in the vicinity of each of said server terminals and each measuring [measures] a respective load in a [the] route from the route load measuring unit [up] to one client terminal having issued a request for service out of said client terminals; and
a selecting unit which selects one server terminal out of said server terminals as a destination of the request for service from said one client terminal based on the [route] load measured by said route load measuring units,
wherein said route load measuring units each measures, as the load, an effective bandwidth of the route, the effective bandwidth estimated based on a plurality of parameters.

2. (TWICE AMENDED) The relaying apparatus for use in a network system according to Claim 1, further comprising [comprises] a storing unit which stores the [a route] load measured at a pre-specified time interval by each of said route load measuring units, [up to said one client terminal;] and wherein
when a request for service is received from said one client terminal, said selecting unit selects said one server terminal out of said server terminals as a destination of the request for service from said one client terminal based on the [route] load stored in the storing unit.

3. (ONCE AMENDED) The relaying apparatus for use in a network system according to Claim 2, [;] wherein each of said route load measuring units monitors [the] operating states of respective server terminal[;] and

when a request for service is received from said one client terminal, said selecting unit selects one server terminal out of said server terminals as a destination of the request for service from said one client terminal based on the [route] load and the operating states monitored by said load measuring units.

4. (ONCE AMENDED) A relaying apparatus for use in a network system, the [which] network system including [is formed with] a plurality of client terminals and server terminals that are divided into several groups each having at least two of the server terminals and that provide [providing] services to those client terminals via a network, the relaying apparatus comprising:

a plurality of route load measuring units each provided with respect to each of the groups and each measuring [measures] a respective load in a [the] route from the route measuring unit [up] to one client terminal having issued a request for service out of said client terminals; and

a selecting unit which selects one route load measuring unit[s] out of said route load measuring units as a primary destination of the request for service from said one client terminal based on the [route] load measured by said route load measuring units,[:] wherein

said one route load measuring unit selects one server terminal out of the [several] server terminals in the group as a secondary destination of the request for service from said one client terminal, and

said route load measuring units each measures, as the load, an effective bandwidth of the route, the effective bandwidth estimated based on a plurality of parameters.

5. (ONCE AMENDED) The relaying apparatus for use in a network system according to Claim 4,[:] wherein each said route load measuring units monitors [the] operating states of the respective server terminals [terminal] in the group,[:] and said one route load measuring unit selects one server terminal out of the [several] server terminals in the group based on the operating states when selecting the [a] secondary destination [of the request for service from said one client terminal].

6. (ONCE AMENDED) A relaying apparatus for use in a network system, the [which] network system including [is formed with] a plurality of client terminals and server terminals that are divided into several groups each having at least two of the server terminals and that provide [providing] services to those client terminals via a network, the relaying apparatus comprising:

a plurality of route load measuring units each provided with respect to each of the groups, each measuring [measures] a respective load in a [the] route from the route measuring unit [up] to one client terminal having issued a request for service out of said client terminals and monitoring [monitors the] operating states of said server terminals in each group; and

a selecting unit which selects one route load measuring units out of said route load measuring units as a primary destination of the request for service from said one client terminal based on the [route] load measured and the operating states monitored by said route load measuring units,[:] wherein

said one route load measuring unit selects based on the operating states one server terminal out of the several server terminals in the group as a secondary destination of the request for service from said one client terminal and

said route load measuring units each measures, as the the load, an effective bandwidth of the route, the effective bandwidth estimated based on a plurality of parameters.

7. (NEW) A relaying apparatus for use in a network system, which network system is formed with a plurality of client terminals and server terminals providing services to the client terminals via a network, comprising:

a plurality of path load measuring and operating state monitoring devices, arranged to measure effective bandwidths of path loads from a client terminal requesting service to server terminals and to monitor operating states of server terminals; and

a DNS-responding device to compare effective bandwidths of measurements of path loads from the plurality of path load measuring and operating state monitoring devices to the client terminal and to select a server terminal having a largest effective bandwidth and an active operating state to provide service to the client terminal.

8. (NEW) A relaying apparatus for use in a network system, which network system is formed with a plurality of client terminals and server terminals providing services to the client terminals via a network, comprising:

a plurality of path load measuring and operating state monitoring devices, arranged to measure, as loads in paths from a client terminal requesting service to server terminals, effective bandwidths of the paths and to monitor operating states of server terminals; and

a DNS-responding device to compare the effective bandwidths measured by the path load measuring and operating state monitoring devices and to select a server terminal having a largest effective bandwidth and an active operating state to provide service to the client terminal.